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Notice of Allowability	**Application No.** 10/681,604	**Applicant(s)** DORNBUSCH, ANDREW W.	
	Examiner Richard Chan	**Art Unit** 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *12/21/06*.
2. ☒ The allowed claim(s) is/are *1-4,7-16 and 18-30*.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
   1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)
1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-4, 7-16, and 18-30 are allowed.

2. The following is an examiner's statement of reasons for allowance:

With respect to claim 1, Hagen discloses an antenna error detection and circuit protection system, comprising: a current limit detection circuit **Fig.1** integrated within an integrated radio receiver and configured to detect current levels through **node 170** drawn by at least one antenna mounted remotely from the integrated radio receiver frp, **node 120**, the current limit detection circuit having a gate drive signal **105** as an output; and a current limiting pass transistor **110** having its source and drain coupled between a supply voltage from **node 150** and an antenna from **node 120** and having its gate **105** coupled to the gate drive signal from **I_monitor**; wherein the current limit detection circuit is configured to adjust the gate drive signal to reduce current flow through the pass transistor when the detected current level drawn by the at least one antenna rises above a current limit level **Col.1-2 lines 40-19.**, however the Hagen reference does not disclose wherein a terrestrial antenna and a satellite antenna are coupled to the current limit detection circuit and to the current limiting pass transistor.

The Durst reference however discloses wherein a satellite and terrestrial antenna are coupled together within a receiver system. Fig.4 (Paragraph 0031)

However, the prior art does not specifically disclose wherein the integrated radio receiver includes a terrestrial antenna input pin, a satellite antenna input pin, and an antenna sense input pin; and wherein the terrestrial antenna is coupled to the terrestrial antenna input pin, the satellite antenna is coupled to the satellite antenna input pin, and the terrestrial and satellite antennas are both coupled to the antenna sense input pin.

Claims 2-4 and 7-13 are dependent on allowable claim 1.

With respect to claim 14, Ward discloses an antenna error detection and circuit protection system, comprising: a current **43** and voltage detection circuit **46** and **50** in interface module **24**, integrated within an integrated radio receiver **10** and configured to detect current and voltage levels drawn by at least one antenna **30** mounted remotely from the integrated radio receiver in antenna module **11**, the current and voltage detection circuit configured to determine under-current, over-current, and over-voltage antenna error conditions **Col.3 lines 32-49 and Col.4 lines 14-29**; and at least one antenna error output pin **35** for the integrated radio receiver, the antenna error output pin providing an output signal indicative of an antenna error condition **(Col. 3 lines 23-29),** however the prior art does not disclose wherein a terrestrial antenna and a satellite antenna are coupled to the current and voltage detection circuit, the current and voltage detection circuit being configured to determine under-current, over-current, and over-voltage antenna error conditions for the terrestrial antenna and the satellite antenna.

Claims 15, 16, and 18-26 are dependent on claim 14.

With respect to claim 27, Hagen discloses a method for detecting errors in and protecting antenna circuitry, comprising: detecting current levels drawn by at least one antenna mounted remotely from the integrated radio receiver; generating a gate drive signal **105** based upon the detected current levels through current detection **node170**; controlling current through a current limiting pass transistor **110** with the gate drive signal, the current limiting pass transistor having its source and drain coupled between a supply voltage node **150** and an antenna node **160** and having its gate coupled to the gate drive signal **105**; and adjusting the gate drive signal to reduce current flow through the pass transistor when the detected current level drawn by the at least one antenna rises above a current limit level **Col.1-2 lines 40-19**, **.,** however the Hagen reference does not disclose wherein a terrestrial antenna and a satellite antenna are coupled to the current limit detection circuit and to the current limiting pass transistor.

The Durst reference however discloses wherein a satellite and terrestrial antenna are coupled together within a receiver system. Fig.4 (Paragraph 0031)

However the prior art does not specifically disclose wherein the method for detecting errors in and protecting antenna circuitry, comprising: providing an integrated radio receiver including a terrestrial antenna input pin, a satellite antenna input pin, and an antenna sense input pin; coupling the terrestrial antenna to the terrestrial antenna input pin, the satellite antenna to the satellite antenna input pin, and both the terrestrial and satellite antennas to the antenna sense input pin.

Claims 28-30 are dependent on allowable claim 27.

With respect to claim 32, Ward discloses a method for detecting errors in and protecting antenna circuitry, comprising: detecting current levels drawn by at least one antenna mounted remotely to an integrated radio receiver **10** to determine under-current, over-current, and over-voltage antenna error conditions; detecting voltage levels drawn by at least one antenna mounted remotely from the integrated radio receiver to determine under-current, over-current, and over-voltage antenna error conditions **Col.3 lines 32-49 and Col.4 lines 14-29**; and utilizing at least one antenna error output pin **35** for the integrated radio receiver to provide an output signal indicative of an antenna error condition, however the prior art does not disclose wherein a terrestrial antenna and a satellite antenna are coupled to the integrated radio receiver and wherein the detecting steps comprise detecting current and voltage levels for both the terrestrial antenna and the satellite antenna.

Claims 33, 34, and 36-39 are dependent on claim 32.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chan whose telephone number is (571) 272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Chan
Art Division 2618
1/23/07

NAY MAUNG
SUPERVISORY PATENT EXAMINER